



A Vision for the Future Unfolds

1987-88 Annual Report

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The Ontario Cancer Institute incorporating The Princess Margaret Hospital is Canada's largest centre for cancer treatment, research and education. Since it opened in 1958, the OCI/PMH has earned an international reputation for excellence.

Each year approximately 7,000 new patients are as-

sessed and treated at this 202-bed University of Toronto teaching hospital. Physicians also travel on a regular basis to outreach clinics in Sudbury, Sault Ste. Marie, North Bay, Peterborough and Timmins.

The OCI/PMH has teaching programs in medical and radiation oncology, and the School for Therapy Radiographers is the largest in Canada. Many other departments are also certified to provide a variety of learning opportunities for students.

In the research divisions more than 30 career scientists form the core of the Medical Biophysics Department of the University of Toronto. In addition to their own research, the scientists also teach and provide lab space for graduate students and post-doctoral students. The OCI/PMH has also been appointed as a training centre for Terry Fox Fellows by the National Cancer Institute.

The OCI/PMH is fully accredited by the Canadian Council on Hospital Accreditation and is affiliated with The Ontario Cancer Treatment and Research Foundation.



500 Sherbourne Street,
Toronto, Ontario.
M4G 3L8

91-04604/

Meeting the Challenges of Today While Planning for the Challenges of Tomorrow

Today

our staff and volunteers are
challenging our mission to care,
to discover, to teach and to share.

Today

our staff and volunteers are also
planning for a new cancer
system that will meet the needs of
your children when they are adults.



Developing a Strategy for the Future Based on... Shared Beliefs... A Shared Vision... A Shared Commitment...

■ *Having enunciated*

*the destination, we can now plan our route with enthusiasm and undertake
the journey with confidence...*

In 1987, the question of "WHERE?" will the new OCI/PMH be located was answered when the Minister of Health announced that funds had been committed for OCI/PMH to rebuild on University Avenue.

In 1988, the challenge has been to develop plans for the allocation of funding that will provide the best possible facility for patient care, research and education for the people of Ontario.

Our vision is that the new OCI/PMH will be the core and heart of an extensive, multi-layered and comprehensive cancer care system. During 1987-88 it has meant chal-

lenging our staff and board to examine and spell out their fundamental beliefs about our mission and goals.

But that planning has not been done in isolation. Countless hours have been spent consulting and planning with staff from the other teaching hospitals, the University of Toronto, The Ontario Cancer Treatment and Research Foundation and the Ministry of Health. We must ensure that all our programs fit with and support each other to provide the best overall system of cancer care, research and education.

But while planning for the future, the Institute has had to cope with the reality

of the current inadequate facilities.

This year all hospitals have faced major budget constraints. The OCI/PMH is complying with the Minister of Health's request for a balanced budget by March 31st 1989, but with great difficulty. Improvements to the quality of programs in diagnosis and treatment are being deferred because of budgetary restraint. Ten beds were closed at the end of 1987 due initially to nursing shortages. However, through innovative patient management, more home care and more outpatient chemotherapy, we are able to leave those beds closed and use the resources this freed for other critically important developments in our program.

The greatest pressure continues to be in radiation therapy. The number of new patients we can treat each year has peaked at about 5,500 on nine radiation therapy machines. Funding was approved and planning started for an additional four machines to be installed in the basement of Mt. Sinai Hospital. They will likely be ready to treat patients in 1990. These machines will be operated by OCI/PMH and will eventually be linked to the new OCI/PMH when it is completed.

To help strengthen our corporate management capabilities, the position of Chief Information Officer was established this year. In the coming year, the corporate

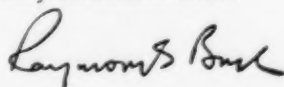
management team will be further strengthened through the appointment of a Chief Medical Officer.

Discussions also continued towards a merger with the Ontario Cancer Treatment and Research Foundation (OCTRF). The Ministry of Health is committed to the proposed merger which we feel will strengthen the Provincial cancer system. In keeping with these initiatives, the Minister of Health has also announced the creation of the position of cancer care co-ordinator within the Ministry. We are hopeful this appointment will facilitate an understanding of the needs of the system.

During the past year, the demands of planning for

our future and the relocation in addition to normal workloads have placed tremendous pressures on staff at all levels. In this year's annual report, we would like to pay tribute to our staff, volunteers and Board members for the significant time and effort they have contributed to planning for tomorrow while caring, discovering and teaching today.

Throughout this report are excerpts from the OCI/PMH Mission and Vision statement which reflect our belief in our staff and their ability to provide the highest standards of care, research and teaching for the people of this province for many decades to come.



Dr. Raymond Bush
Director



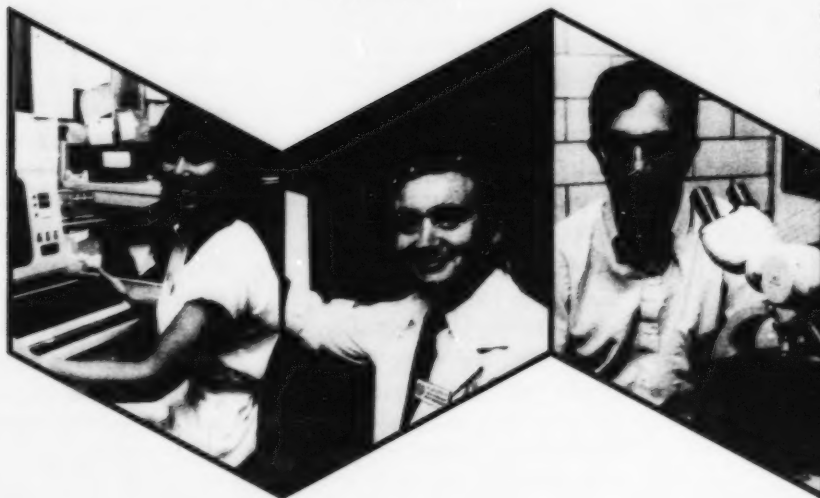
Mr. Kenneth Clarke
Chairman



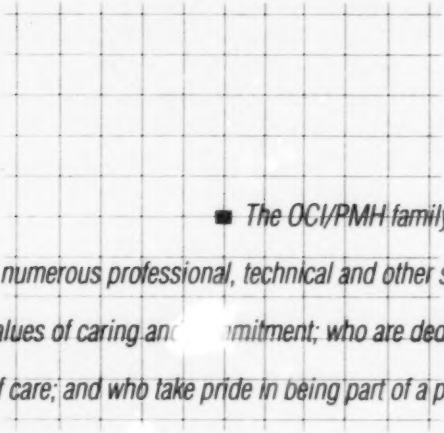
I would like to pay a special tribute to Dr. Raymond Bush, who earlier this year announced his intention to step down after 12 years as Director. During that time he has been responsible for leading the OCI/PMH through a very difficult period of adjustment as the Institute has grown from a small hospital and research centre to a leading force in the complex and rapidly changing field of cancer treatment and research. Dr. Bush will resume his practice as one of Canada's leading radiation oncologists. Dr. Donald Carlow of the Winnipeg Health Sciences centre will succeed Dr. Bush as the new Director.

Mr. Kenneth Clarke,
Chairman

"OCI/PMH's greatest strengths are the skill and commitment of its staff and volunteers, and the goodwill of its patients and constituent institutions ..."



Caring Today... While Planning for Care



■ The OCI/PMH family

includes numerous professional, technical and other support staff who subscribe to the values of caring and commitment; who are dedicated to providing the highest level of care; and who take pride in being part of a patient care team

■ **OCI/PMH Studies Point The Way To Even More Conservative Treatment For Women With Breast Cancer**

After many years of promoting lumpectomies rather than mastectomies, OCI/PMH physicians are now looking for further safe ways to reduce the amount of treatment women must undergo for breast cancer. They feel that the majority of patients don't need the followup radiation therapy now given after surgery.

First, they looked back at the records of 1500 patients since 1958 who had surgery with radiation or surgery alone. The surprising results were that overall survival

rates were the same. Without radiation the patients had more frequent recurrence in the breast, but this did not influence survival. (The overall survival for OCI/PMH breast patients with early disease treated conservatively is 83% at 5 years and 70% at 10 years.) This encouraging information from past charts made it possible to set up a trial with current patients.

Physicians at OCI/PMH see more than 1200 breast patients every year which makes this Hospital ideal for setting up clinical studies. In just 5 years, they have entered 800 patients into a formal trial to compare the results of radiation with no

radiation. These patients will now be followed carefully for the rest of their lives.

Physicians are committed to this study because they want to give patients the best chance for survival, but do not want to give them unnecessary radiation or chemotherapy. In the U.S. where radiation therapy after breast surgery can cost \$10,000, there is an obvious economic reason to avoid unnecessary radiation therapy.

The challenge now is to identify those patients who have a high risk of developing recurrent cancer. This would make it possible to give those patients the additional radiation or chemotherapy to prevent recurrence.

Tomorrow

More than 1 out of 4 of today's young people will develop cancer in their lifetime. More than half of these patients can and will be cured. But we must plan today to ensure there will be a Princess Margaret Hospital which will be able to treat them when they need our care in the future.



Dental Program Reduces Complications After Treatment

In a unique Canadian program, the OCI/PMH dental team under Dr. W. Maxymiw, is preparing special dental splints for patients before they undergo major jaw surgery for cancer. When the splints are inserted at the time of surgery, these patients are immediately able to eat, drink, speak and interact socially. This is in sharp contrast to the usual plan of waiting several months while the surgical site heals before fitting the patient with a dental device to replace the parts of the jaw which are removed.

About 40-60 patients are seen annually at OCI/PMH for these "maxillofacial prostheses". Although the surgery is done elsewhere by surgical consultants, these patients are usually assessed in the OCI/PMH clinics whether or not they require radiation therapy in addition to the surgery. To date a portion of the cost of these devices and care has been covered by the Ontario Cancer Treatment and Research Foundation. However, OCI/PMH staff have been working with the Ministry of Health to expand the Assistive Devices program to cover these prostheses.

The majority of the more

than 450 patients referred annually to the dental department are patients scheduled to receive radiation to the head and neck area. These patients are very susceptible to post-radiation infections unless their mouths are disease-free before treatment. The dentists remove selected unsalvageable teeth before treatment to minimize the impact of the radiation treatment. Patients are also given instructions about mouth care and management of treatment side effects. The result has been a marked decrease in serious post-radiation oral complications among OCI/PMH patients.

■ ***Today's Patients Can Go Home Earlier With Special Teaching and Special Equipment***

Modern technology has opened the doors for patients to go home with a sophisticated array of equipment which was previously available only in hospital. But for this to happen a special team is required: staff with the patience to teach the skills; physicians who are willing to adapt traditional treatment; and above all, patients who are motivated to learn the skills.

Management of catheters, self-injection of drugs

and self-administration of chemotherapy are just some of the sophisticated programs which increasingly allow some patients to spend more time at home with their families.

The ambulatory infusion pump is no bigger than a Walkman radio, but frees some patients to receive their chemotherapy or antibiotics at home. Other variations of this pump allow a patient to go home with continuous infusion of narcotics for pain. Other patients learn to care for catheters implanted to allow easier access to veins for intravenous therapy (in-

stead of the usual needle in the hand or arm).

Patients must be carefully screened to ensure they can develop the skills needed for self-management of sophisticated equipment. Specialized teachers from nursing, radiation therapy, pharmacy and other areas teach both the patient and a family member how to manage the devices. Patients are also taught how to manage their symptoms and when to report side effects.

Because of the severity of their illness, not all patients can be managed at home. But overall, hospitalization time has decreased for some



"...your personnel are absolutely superb. They are wonderful caring people who examine you and give you whatever treatments you need with the most tender love care. They are sympathetic without being maudlin and what I shall

remember all my life are the gentle hands. When you are hurting and scared to death, being handled gently makes all the difference."

A Patient

treatment programs and patients have developed greater confidence to work with staff and to manage their own disease.

■ *Daycare Unit Expands To Accommodate More Ambulatory Patients*

"Daycare" has a special meaning in a cancer hospital. At OCI/PMH, "Daycare" is where patients go for "daytime care" if they do not need to stay in hospital overnight. It is also called the Ambulatory Care Unit. But whatever it is called, its function is the same; and at OCI/PMH its size grew considerably over the past year. Expansion to five beds and eight reclining chairs means that all ambulatory chemotherapy and infusion of blood products has been centralized to this one area.

Centralizing the chemotherapy means that a pharmacist rather than a clinic nurse prepares the chemotherapy. This gives better quality control overall, but the pharmacists also needed more space in the area to prepare the drugs. In a masterful example of OCI/PMH's ability to fit everyone into a small space, everyone was accommodated.

There is also a bed for day surgery patients who have had uncomfortable diagnostic procedures and a bed for patients or donors at

the cell separator (machine which allows removal of one or more blood parts such as platelets or plasma and then returns the remaining blood to the donor/patient).

As more and more protocols are designed to allow patients to be ambulatory rather than hospitalized, or to go home with infusion pumps, the use of the daycare facilities has risen. However, this is seen as a positive move for both patients and the Hospital. It will keep patients with their families and allow the inpatient resources to be used for other purposes.

■ *Volunteers — Special People Who Give A Special Touch*

"Without exception, the staff and volunteers showed such care and concern for my well-being which gave me confidence and peace of mind which I appreciated so much. I thoroughly enjoyed the crafts — a great diversion!"

"I feel that volunteers do a superb job of making waiting patients comfortable..."

The volunteers provided by the Auxiliary to The Princess Margaret Hospital and Lodge play an important role in helping patients and their families to be more comfortable. Last year, 225 volunteers contributed more

than 43,000 hours of their special type of care.

Volunteers are found in clinics, escorting new patients, arranging flowers for the nursing units, managing the Gift Shop, providing a variety of craft and diversional activities, serving tea, answering inquiries at the Patient and Family Library and always providing directions for lost patients!

Their bright yellow smocks are like a beacon signalling assistance wherever you turn. The staff and patients are grateful for their untiring assistance.



Discovering Today... ..The Foundations of Care

■ *The OCI/PMH brings*

*together under one roof scientists, physicians and other staff to provide a
supportive environment in which both individual initiative and
collaboration can flourish.*

■ **Discovery Of A
"Pump" On Cell Surfaces
Opens New Doors To
Understanding Drug
Resistance**

Discovery of a "pump" on the surface of almost all cells in the body, is opening new doors in the search to understand why some types of cancer develop resistance to drugs.

Dr. Victor Ling of the Biological Research Division, has found that a protein called "P-glycoprotein" on the surface of cells looks and acts like a pump; physically removing unwanted molecules from cells.

Physicians have known for many years that tumours sometimes seem to develop a resistance to drugs. Dr. Ling discovered

that resistant tumours with high levels of the P-glycoprotein are resistant to chemotherapy. The pump is able to actually pump drugs back out of the tumour cells before the drugs can destroy the cell.

Researchers have known that some drugs called "chemosensitizers" can make tumours more responsive to chemotherapy, but they did not understand how. Dr. Ling's group has discovered that at least one of these chemosensitizers is able to block the P-glycoprotein pump. Research in this direction could perhaps lead to the development of more effective chemosensitizers in the future. There is hope that such chemosensitizers may be used successfully against drug-resistant

tumours.

One of the measures of the significance of a discovery is how other scientists around the world respond. In less than three years, the pump concept has gone from a "theory" presented by Dr. Ling, to the focus of an entire session at the annual meeting of the American Association for Cancer Research — the largest annual conference on cancer research.

His discovery is very fundamental and has excited researchers in many fields. This protein pump has now been found on the surface of almost every cell, not just cancerous ones, in both animals and bacteria. Therefore, this pump is now being studied in labs around the world for its possible implication in many diseases.

and Prevention for Tomorrow

■ Carcinogenesis — Discovering How Chemicals Can Cause Cancer

Chemical carcinogenesis — the ability of chemicals to cause cancer — is a subject of acute public concern. But in Dr. Michael Archer's lab, scientists are seeking an understanding of how these chemicals are able to cause cancer.

Dr. Archer says he is committed to studying the causes of cancer. "If we understand how a type of cancer is caused, then we have a chance of eliminating it by avoiding the cause," he said.

His lab is studying the mechanism of carcinogenesis using a family of nitrogen compounds called N-nitroso compounds. Most of



The OCI/PMH's commitment to both strong basic research and applied research is the basis for the prevention, diagnosis and treatment methods for the next generation.

these compounds are known to be powerful cancer-causing agents and are found, for example, in trace quantities in some foods, beverages and tobacco products.

The compounds, called nitrosamines, are of particular interest to Dr. Archer's team because, of the 300 or more nitrosamines studied, almost all cause tumours, even at fairly low levels, in every species of animal, fish and bird tested. Therefore, it is likely that they also cause tumours in humans. Furthermore, each nitrosamine causes a specific type of tumour regardless of how the compound is administered. For example, humans who chew tobacco often get cancer of the mouth and upper gastrointestinal tract. A nitrosamine isolated from the chewing tobacco and injected into a rodent, will also cause tumours in the mouth area. Dr. Archer believes that his research will explain how these chemicals target such specific sites in the body.

They have so far found that the nitrosamine compounds, are metabolized or

broken down by the body. It appears that different tissues are able to break down different chemicals, and that this ability is linked to the appearance of tumours. The question is how?

The nitrosamines are broken into smaller molecules or fragments in the body. These small molecules are unstable and can interact with DNA to cause mutations. These processes may take just a few hours and are the beginning of a long series of gradual cell changes. It may take many years before a cancerous tumour develops.

Currently, this journey from the initial mutated cell to cancerous cell is still not fully understood. It appears that the cell is "promoted" first to non-cancerous lesions which may regress before the malignant tumour finally becomes established. For example it can take about 20 years for lung cancer to develop in a smoker, and polyps in the intestine may develop into colon cancer. However, many questions remain as to whether this "promotion" process can be halted once it

has been initiated.

■ *Magnetic Resonance Imaging — A New Window Into The Body*

A new state-of-the-art, powerful magnetic resonance imager (MRI), installed at OCI/PMH in the fall of 1987, is providing some of the clearest images of the body obtained through this technique.

MRI has emerged rapidly during the 1980's as a valuable diagnostic tool for patients with many disorders. In 1983, the Ontario government selected OCI/PMH as one of the first centres in Canada to receive a machine and to embark on a research program to determine the capabilities of the machine for patient diagnostic purposes.

The new MRI, has a magnet 10 times as powerful as that in the previous machine.

In the older machine there was a signal to "noise" ratio of about 90 per cent. That "noise" had to be filtered out to get a useful image. With the new magnet, there is very little "noise" so the images are

better — better resolution, and better tissue definition.

Magnetic resonance imaging produces an image through any plane of the body similar to the image obtained from a CT scan, but MRI does not use x-rays or any form of radioactivity. Instead, the patient is placed in the centre of a large circular magnet. Each type of body tissue responds in a different way in this field. Signals from radiofrequency pulses can therefore be measured by a computer and used to generate an image on a screen.

At OCI/PMH the machine is used both for clinical diagnosis of patients and for research. The scientists are involved with the fundamental physics of this machine and how those principles can be applied to diagnostic work. The physicians are involved with projects to develop and improve the protocols for imaging different areas of the body. At the present time there are projects involving the prostate, breast and post-radiation changes in the brain.



OCI/PMH investigators believe that peer review and evaluation by international standards are essential to maintain quality and excellence — the hallmark of OCI/PMH Research.

Teaching Today... To Develop Skilled

■ Experienced OCI/PMH staff

serve as role models and participate actively in the training of young people in many fields who are the lifeblood of both current and future programs...

■ OCI/PMH Radiotherapy School Expands To Meet Growing Need For Therapy Radiographers

The OCI/PMH School for Therapy Radiographers moved to new enlarged quarters on Jarvis Street in January 1988. These facilities will support the plan to double the number of students admitted to the program. This increase is in response to the serious shortage of therapy radiographers caused by increasing patient numbers and the increased number of radiation therapy machines across the province to treat these patients.

Already the largest school in Canada, OCI/PMH will have 50 students enrolled for the 8-month classroom segment by 1990. Students from programs in Saskatchewan, the Maritimes and other parts of Ontario join OCI/PMH students for the 8-month

lecture segment before returning to their own centres for the practical part of the 32-month program.

The new facilities at 559 Jarvis Street include two large classrooms, a lounge/seminar room and smaller study/tutorial room. Office space and cloakrooms are also provided. Residence space for out-of-town students continues to be provided in two nearby houses owned by the Hospital.

Staff from many departments are integrally involved in all aspects of the students' training. In addition, two full-time faculty have been added to help with the teaching load.

■ Young Physicians Selected As Terry Fox Fellows To Develop Research Skills

This year, three young physicians were selected in an international competition to

develop their research skills at OCI/PMH as Terry Fox Fellows.

The National Cancer Institute (NCI), which administers the funds raised by Terry Fox, has established these fellowships to encourage physicians to spend up to three years away from their practices developing their skills in either clinical research or basic (laboratory) research. Physician-scientists with both clinical and research skills are rare, but play a vital role in fostering links between scientists and physicians, and between the laboratories and the clinics.

The NCI has granted OCI/PMH approximately \$600,000 which will allow the appointment of five to seven Fellows for training periods of two to three years each. As a research institute and hospital, the OCI/PMH provides an ideal setting for these programs. These prestigious fellowships have been advertised nationally and internationally. The physicians must intend to practice in Canada and to continue with their research after completing their fellowships. They must also be

Staff for Tomorrow

enrolled in masters or PhD programs through the University of Toronto.

The first three fellows selected include a hematologist from Britain, a Canadian surgeon and a recent graduate of the OCI/PMH residency program in medical oncology.

■ *Tomorrow's Scientists*

Graduate students pursuing their M.Sc. and Ph.D. in Medical Biophysics, and post-doctoral fellows from universities around the world, are the lifeblood of fundamental research programs. These students and fellows bring energy, enthusiasm and ideas as they work with the OCI/PMH scientists, and carry on much of the investigative, original research in cancer.

The more than 30 senior scientists in the OCI/PMH's Biological and Physics Research Division are part of the academic life of the University of Toronto through U. of T.'s Department of Medical Biophysics. In addition to their own research, OCI/PMH scientists form the core of research and thesis supervisors and lecturers for 55

graduate students and more than 30 post-doctoral fellows based at OCI/PMH.

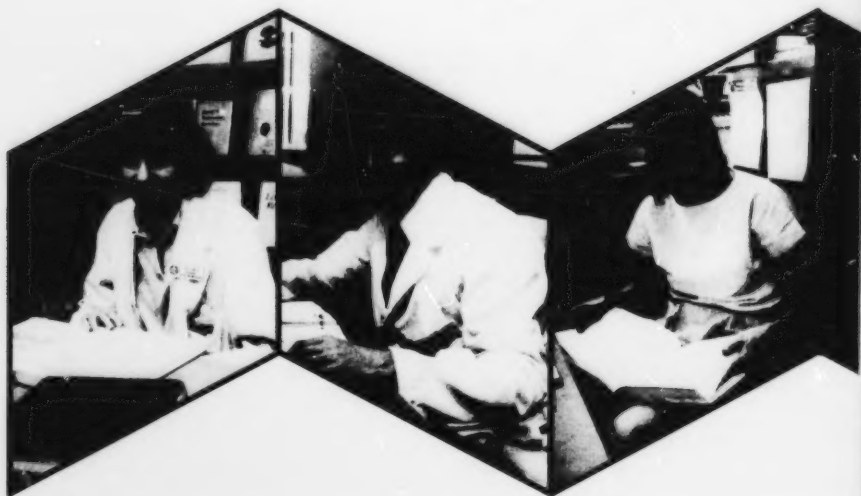
The graduate students and fellows at OCI/PMH have an opportunity to be involved in a wide range of research programs from fundamental molecular biology to the physics and application of imaging via ultrasound, electron microscopy, computer tomographic scanning and magnetic resonance imaging. Most of the graduate students will be at OCI/PMH for about five years as they complete their M.Sc. and Ph.D. degrees.

Through these programs, the Department of Medical Biophysics ensures that as OCI scientists carry out the mission-oriented, applied cancer research for the immediate future, we also provide forward-looking fundamental educational opportunities for the scientists of tomorrow.

■ *Orientation Day Helps District Head Nurses Prepare Patients For Their First Visit To PMH*

Frequent calls from nurses around the city prompted the Department of Nursing to set up a special orientation program to acquaint head nurses with what patients should expect on their first day.

A large number of the Hospital's patients are at other teaching hospitals before they are transferred to PMH for specialized chemotherapy or radiation treatment. By teaching the nurses what to expect, the nurses at other hospitals can help patients be better prepared and less anxious. It can also help ensure that patients arrive with all the right x-rays, forms and medical records. Nurses from 21 hospitals as far away as Sault Ste. Marie have taken part in the program so far.



The Honours Awarded Today... Are Based on Years of Excellence and Achievement

■ *The excellence of an
organization is the sum total of the excellence and dedication
of the individual staff members.*

Dr. F. Adams (Division of Neuropsychiatric Oncology)

- Chairman, Section of Neuropsychiatry, Canadian Psychiatric Association, 1987-88.

Dr. M.J. Bronskill (Physics Division)

- Canadian Association of Physicists Lecturer 1987-88.

Dr. V. Ling (Biological Research Division)

- C. Chester Stock Award for distinguished achievement in biomedical research. Memorial Sloan Kettering Cancer Centre. New York.
- Glaxo Lecture, British Cell Biology Meeting. Bristol England, 1988.

Dr. T.W. Mak (Biological Research Division)

- Canadian Association of Manufacturers of Medical Devices Award. Toronto. 1988.
- University of Alberta 75th Anniversary Distinguished

Scientist Award. 1988.

- Keynote Address, Japanese Society of Transplantation. Fukuoka City, Japan. 1988.
- Inaugural Address, European Society of Hematology. Geneva, Switzerland. 1988.

Dr. E.A. McCulloch (Head, Biological Research Division)

- President, Academy of Science, Royal Society of Canada. 1987.

Dr. P. Ottensmeyer (Physics Division)

- Appointed Chairman, Department of Medical Biophysics. April 1987.
- Class of 2T5 Engineering Alumni Award. June 1987.

Dr. S.B. Sutcliffe (Department of Radiation Oncology)

- Resident Award for Excellence in Teaching. Princess Margaret Hospital. 1987.

OCI/PMH 25-Year Service Awards 1962-87

Mrs. D. Alves,
Nutrition Dept.

Mrs. B. Arengo-Jones,
Volunteer

Dr. J. Carruthers,
Pathology Dept.

Mrs. E. Comeau,
Glasswashing

Dr. R. Hasselback,
Medical Oncology

Mrs. T. Miyamoto,
Volunteer

Miss M. Slessor,
Dept. of Nursing

Mrs. R. Warr,
Outpatient Dept.

Statistics

Total Outpatient Visits to PMH April 1987-March 1988

	<u>1987-88</u>	<u>1986-87</u>
New patient registrations in OPD	5,337	5,225
Follow-up visits in OPD	58,509	59,839
Day care	6,926	6,523
External beam XRT treatments to outpatients	65,466	64,455*
External beam XRT treatments to inpatients from other hospitals	2,473	2,850
Visits to cell separator	567	1,252
Total	<u>139,278</u>	<u>140,144</u>

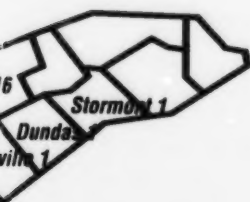
* Did not include 3,154 treatments given at Toronto-Bayview Regional Cancer Centre April-August '86 during construction at PMH.

Services at Peripheral Clinics April 1987-March 1988

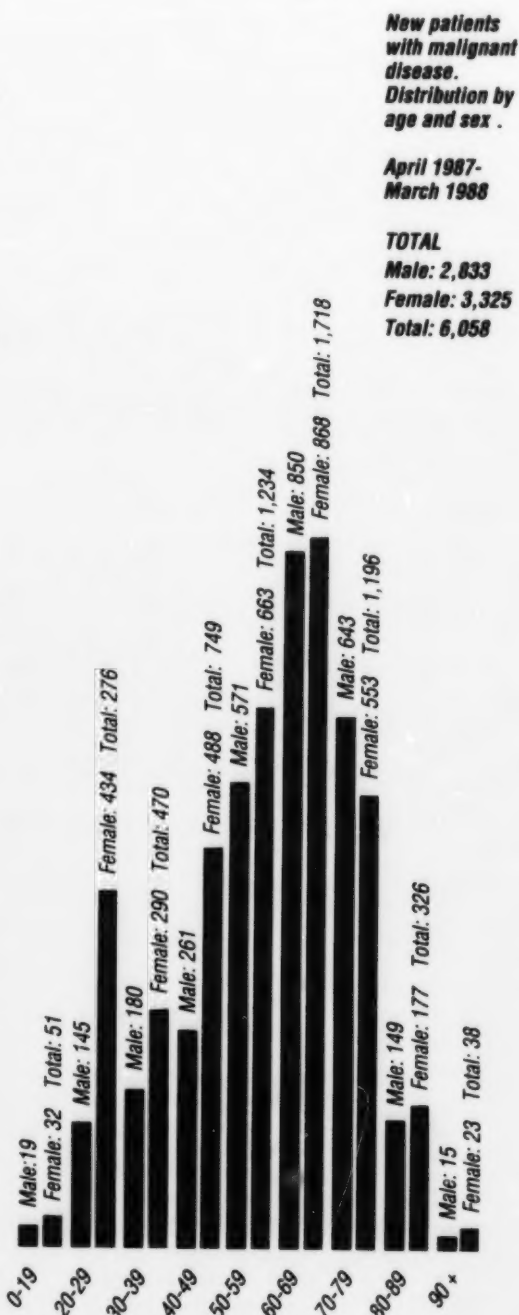
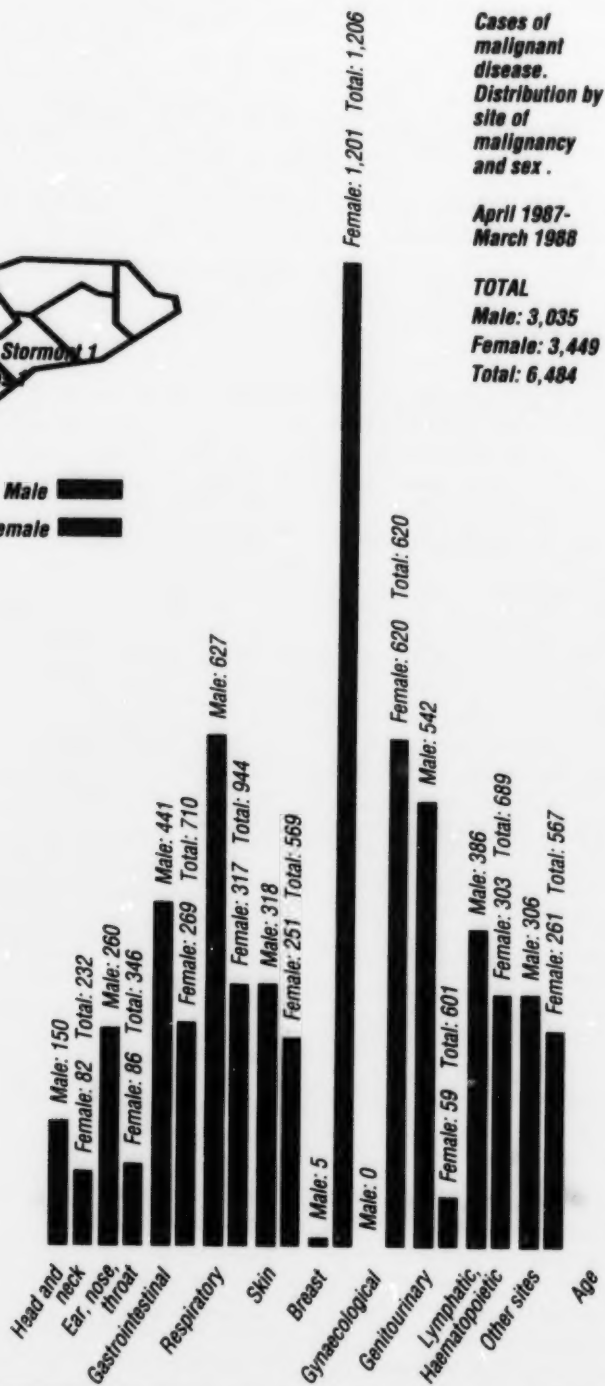
Clinic	New Patients Seen	Total Visits
North Bay	97	1,260
Owen Sound	5	274
Peterborough	9	1,611
Sault Ste. Marie	37	658
Sudbury	3	1,061
Timmins	26	870
Total	<u>177</u>	<u>5,734</u>

Number of Treatments Given in the Radiation Therapy Department April 1987-March 1988

External Beam	<u>1987-88</u>	<u>1986-87</u>
Superficial x-ray	1,013	1,145
Deep x-ray	2,009	2,061
Cobalt	39,958	41,634
Linear accelerators:		
Low energy	8,433	8,652
High energy	26,986	28,567
Total	<u>78,399</u>	<u>82,059</u>
Inpatient treatments	12,933	14,450
Outpatient treatments	65,466	67,609
Total	<u>78,399</u>	<u>82,059</u>
Sealed Sources		
Intracavity	235	274
Interstitial (needles, wires & seeds)	32	30
Strontium	65	65
Total	<u>332</u>	<u>342</u>



Male 
Female 



Our Donors... Providing Vital Support

■ *Our donors provide an important part of the support for OCI/PMH research and clinical programs. The PMH Trust has for many years accepted and managed donations made directly to The Princess Margaret Hospital. This is separate from the Ontario Cancer Care Fund which is currently being set up with The Ontario Cancer Treatment and Research Foundation and the Canadian Cancer Society, Ontario Division, to raise the \$50 million needed to rebuild the OCI/PMH and the treatment centres in Hamilton, London and Sudbury.*

The operations of The Princess Margaret Hospital, which is incorporated in The Ontario Cancer Institute, are financed similarly to those of other public hospitals in Ontario with the exception that additional funds are received from The Ontario Cancer Treatment and Research Foundation.

Basic support for the clinical and fundamental research carried out at The Ontario Cancer Institute is provided by The

Ontario Cancer Treatment and Research Foundation and the Province of Ontario. In addition, research grants, contracts, fellowships and scholarships from the following sources have provided the further support necessary for research programs.

*Adria Laboratories
Alberta Heritage Foundation
Banting Research Foundation
Bristol Myers Company
Canadian Medical Association
Cancer Research Institute*

*Centocor
C.I.D.A.
Crusade Against Leukemia
Cyanamid, Canada Inc.
Hoffman La-Roche Ltd.
IMREG Inc.
Janssen Pharmaceutica Inc.
Leukemia Research Foundation
Life Track
Massachusetts Institute of Technology
McGill University
Ministry of Health
Ministry of National Health & Welfare*

*National Cancer Institute of Canada
National Cancer Institute,
National Institutes of Health (U.S.A.)
Ortho Pharmaceutical
Quadrologic Technologies
St. Michael's Hospital
Schering Canada Inc.
T Cell Sciences Inc.
Technicare Corporation
University of Toronto
The Upjohn Company of Canada
Warner Lambert Ltd.*

SUBSTANTIAL DONATIONS:

We are grateful to the following individuals, groups and companies who have supported the hospital through the PMH Trust during the past year...

Abitibi-Price

Mr. M.J. Allen
Mr. V. de Angelis
Mrs. A. Armstrong
Atkemix Inc.
Mr. N. Auslander
Bank of Montreal "Our People Fund"
Mr. William E. Barnett
Mr. Wm. Bates
Mr. R. Bauer
Mr. Clifford R. Bebee
Mr. & Mrs. W. Black
Mrs. M. Black
Blake, Cassels & Graydon
Miss E. Bond
Bowlerama Ltd.
Mrs. B. Bradden
Mr. Kenneth Bramble
Brewer's Retail, Toronto
District Employees Welfare Fund
Mr. George C. Britton
Mrs. O. Bryant
Ms. N. Budeniuk
Canadian Computer Golf Tournament
Canwest Exploration Co. Ltd.
Mrs. V.L. Carr
Mrs. V. Carruthers
Cavalier Beverages
Ms. G. Chan
Mr. J. Chantler
Chrysler Canada Employees
Mrs. Lynnette Chu Fook
Mr. Kenneth Clarke
Mr. John G. Collins
Mr. W. Colwill
Mrs. H. Cooke
Miss Edith Cox
Mrs. P.D. Corss
Mrs. Harold M. Curry
Cyanamid Canada Inc.
Mrs. Helen D'Arcy
Mr. S. Dane
Mrs. D. Devins
Mr. P. Dilley

Dinetz Restaurant Equipment Ltd.

Mr. E. Dixon
Mr. P. Dixon
Mrs. N. Duncan
Mrs. Janet Durocher
Mr. R. Ekmekji
Equitable Life
Mrs. M. Esson
Fairhaven Christadelphian Charitable Foundation
Mr. Robert Falkner
Dr. G. Fraser Fellows
Dr. P.J. Fitzpatrick
Mr. R. Foley
Friedberg Mercantile Group
Garrett Canada Employees Fund
Mrs. R. Gawitz
Gracious Living
Mr. H. Greenberg
Mr. Morris Gross
Guelph Police Assoc.
Mr. & Mrs. A.S. Hallamore
Mr. R. Hammonds
Mr. Edwin Hart
Mrs. M.C. Hart
Mrs. Ruth Hills
Mr. Robert Hoffman
Honda Canada Inc.
Mr. D. Honey
Rev. John Honeyman
Mrs. K. Horkits
Mr. A. Hrabovsky
Nelson Arthur Hyland Foundation
IBM Canada Ltd.
IBM Employees Charitable Fund
Mr. S.A. Johnson
Mrs. I.B. Kent
Mr. M. Kerr
Kester Electric Supply Ltd.
Mr. J.R.M. Kilpatrick
Mrs. M. King
Mr. & Mrs. A. Kunyk
Mr. E. Lee
Mrs. L. H. Lee
Mr. V.W. Lee
Mr. Charles Lewis
Mr. A.F. Lindsay
Long Manufacturing Ltd.
Mrs. G. Lyon
Maple Leaf Auto Glass
Mrs. Y.K. Mark

Mrs. G. Martel
Mr. A.E. Mathews Jr.
Mr. G. McCoy
Mrs. L. McCutcheon
McDonnell Douglas Ltd.
McDonnell Douglas Canada Ltd., Salaried Employees Union
Mrs. A. McGovern
Mrs. J. McLean
Mr. Robert L. McLeish
Mr. J.L. Melnick
Mr. D.W. Menzel
T. Donald Miller Foundation
Mr. John Milnes
Mrs. S. Molinaro
Mrs. John Morden
Ms. C. Morishita
Mr. E. Natale
Gene Natalie
Mens Clothier Inc.
Mr. T. Nelson
Mrs. H. Nicholls
Mr. G. Nicholls
The Donald G. Nurse Foundation
One of a Kind Contest
N. & A. Paolucci Charitable Foundation
Mr. D. Parker
Mr. A.S. Perosa
Phillips, Hagar & North Ltd.
Polysar Limited Employees
Portobello Market
Mrs. F. Pristine
Mrs. J. Prospero
Purdue Frederick Inc.
Mr. David Reesor
Mrs. M. Reid
Dr. M. Reis
Mr. J. Rizo
Mrs. M.I. Robertson
Mr. J. Robertson
Mrs. S. Robertson-Baranick
Mr. & Mrs. Robson
Rosart Properties
Mr. H. Rose
Mrs. G. Ross
Dr. R. Rowe
The Royal Bank of Canada
Mrs. S. Rubin
Mr. John Rumpel
Saatchi & Saatchi Compton
Hayhurst Ltd.
Mr. G. Saddler

The Salden Foundation
Samuelsohn Family
Mrs. M. Shepherd
The Gertrude & David Sher Foundation
Mr. & Mrs. J. Sigal
Knud Simonsen Industries Ltd.
Mr. A. Sirtilli
Alexander Solomon Holdings Ltd.
Mr. Bernard Soostmeyer
Mr. & Mrs. H. Spofford
Steeles College Memorial Chapel
Mr. Robert W. Stevens
Mrs. G.A. Stokes
Syllogos Proti Ladies Branch
Dr. L. Taichman
Mr. R. Tam
Mrs. A. Teichroeb
Mr. M. Tolton
Mr. T.E. Topping
Mr. Philip Torno
Metro Toronto Community Foundation
Mr. C.D.R. Travers
The Upjohn Company of Canada
Mr. S. Vaja
Mrs. Y. Vetere
Vickers & Benson Advertising
Mrs. L. Webber
William Webster & Sons Ltd.
Miss Nancy Weir
Mrs. V. Wheatley-McDermott
Mr. G. Wheelans
Mr. Katherine Williams
Mr. & Mrs. L.H. Williams
Mr. F.G. Wilson
Wood Gundy Inc. Employees
Mrs. Wai-lin Yau
The York Downs Golf & Country Club
Mr. G. Zucchi

The Ontario Cancer Institute Financial Statements March 31, 1988

The Ontario Cancer Institute Balance Sheet March 31, 1988
(with comparative figures at March 31, 1987)

Assets	1988	1987
Current:		
Cash	\$548,714	\$1,368,248
Short-term investments, at cost including accrued interest (which is equivalent to market)	6,489,430	11,686,065
Accounts receivable -		
Patients' accounts	1,414,406	944,380
Ontario Ministry of Health	4,373,930	2,229,510
The Ontario Cancer Treatment and Research Foundation	628,798	376,697
Other (note 5)	613,585	665,596
Research grants receivable		201,803
Due from P.M.H. Trust (note 4)	12,358	
Inventory of supplies, at cost	864,553	946,683
Prepaid expenses	227,543	201,670
Total current assets	15,173,317	18,620,652
Property, at cost:		
Land	3,033,365	3,033,365
Buildings	24,298,976	20,778,073
Equipment and furniture (note 6)	28,812,854	21,876,160
	56,145,195	45,687,598
Less accumulated depreciation (note 6)	25,577,865	22,708,452
	30,567,330	22,979,146
Construction in progress	1,930,257	4,331,373
	32,497,587	27,310,519
	\$47,670,904	\$45,931,171
Liabilities and Fund Balance	1988	1987
Current:		
Accounts payable and accrued liabilities	\$5,908,752	\$5,828,522
Research grants received in advance	551,459	
Due to P.M.H. Trust (note 4)		57,148
Capital grants received in advance	4,548,387	8,712,692
Total current liabilities	11,008,598	14,598,362
Fund balance (note 6)	36,662,306	31,332,809
(See accompanying notes)	\$47,670,904	\$45,931,171

On behalf of the Board:

N. B. Shuff

Member

K. L. Clarke

Member

The Ontario Cancer Institute Statement of Operations for the year ended March 31, 1988
(with comparative figures for the year ended March 31, 1987)

	1988	1987
Revenue for patient care, research and education:		
Ontario Ministry of Health and others for patient services	\$51,000,402	\$47,418,096
The Ontario Cancer Treatment and Research Foundation	4,397,392	4,174,243
Other granting agencies	8,556,123	8,343,241
Recoveries and other income	3,254,984	2,752,590
	<u>67,208,901</u>	<u>62,688,170</u>
Expenses for patient care, research and education:		
Salaries and wages	47,585,259	43,669,172
Supplies and other operating expenses	19,481,213	18,513,725
	<u>67,066,472</u>	<u>62,182,897</u>
Excess of revenue over expenses before depreciation	<u>142,429</u>	<u>505,273</u>
Depreciation of buildings	605,958	517,935
Depreciation of equipment and furniture	2,480,082	1,691,909
	<u>3,086,040</u>	<u>2,209,844</u>
Excess of expenses over revenue for the year	<u>\$(2,943,611)</u>	<u>\$(1,704,571)</u>

(See accompanying notes)

Auditors' Report

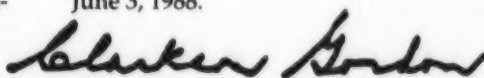
To the Members
of The Ontario Cancer
Institute:

We have examined the balance sheet of The Ontario Cancer Institute as at March 31, 1988 and the statements of operations, fund balance and changes in cash position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these finan-

cial statements present fairly the financial position of the Institute as at March 31, 1988 and the results of its operations and the changes in its financial position for the year then ended in accordance with the accounting policies described in note 1 to the financial statements applied on a basis consistent with that of the preceding year.

Toronto, Canada,
June 3, 1988.


Chartered Accountants

The Ontario Cancer Institute Statement of Fund Balance for the year ended March 31, 1988
(with comparative figures for the year ended March 31, 1987)

	1988	1987
Balance, beginning of year, as restated (note 6)	\$31,332,809	\$27,365,104
Deduct excess of expenses over revenue for the year	(2,943,611)	(1,704,571)
	<u>28,389,198</u>	<u>25,660,533</u>
Add grants for building alterations and equipment:		
Ontario Ministry of Health	7,626,839	4,656,742
The Ontario Cancer Treatment and Research Foundation	127,382	208,294
P.M.H. Trust (note 4)	90,274	67,896
Other	428,613	739,344
	<u>8,273,108</u>	<u>5,672,276</u>
Balance, end of year (See accompanying notes)	<u>\$36,662,306</u>	<u>\$31,332,809</u>

The Ontario Cancer Institute Statement of Changes In Cash Position for the year ended March 31, 1988 (With comparative figures for the year ended March 31, 1987)

	1988	1987
Cash and short-term investments, beginning of year	\$13,054,313	\$5,343,779
Cash provided by (used in) operating activities:		
Excess of expenses over revenue for the year	(2,943,611)	(1,704,571)
Add back depreciation, being an item not requiring a current cash outlay	3,086,040	2,209,844
	<u>142,429</u>	<u>505,273</u>
Changes in non-cash working capital balances related to operations-		
Accounts payable and accrued liabilities	80,230	1,224,612
Accounts receivable	(2,814,536)	133,656
Research grants received in advance	753,262	(668,222)
Other	(13,249)	(1,350)
	<u>(1,851,864)</u>	<u>1,193,969</u>
Cash provided by (used in) capital activities:		
Capital grants received	3,614,905	12,023,044
Interest on capital grants received in advance	493,898	165,797
Capital asset acquisitions	(8,273,108)	(5,672,276)
	<u>(4,164,305)</u>	<u>6,516,565</u>
Net change in cash position during the year	<u>(6,016,169)</u>	<u>7,710,534</u>
Cash and short-term investments, end of year	<u>\$7,038,144</u>	<u>\$13,054,313</u>
(See accompanying notes)		

1. Summary of significant accounting policies

a) Basis of operating funding

Pursuant to the Health Insurance Act the Institute receives funds from the Ontario Ministry of Health (the "Ministry") to substantially cover its operating costs. Funds are received during the year based on a total amount approved by the Ministry in respect of the fiscal year. The portion of Ministry funding applicable to operations is credited to operating revenue in the year to which the grant applies. Any surplus or deficit arising from the difference between the Institute's actual operating results for the year and the amount approved by the Ministry is retained or financed by the Institute.

b) Capital grants

Grants received for capital purposes from the Ministry and other sources are credited to the fund balance as the related expenditures are made. Amounts received in advance of the related expenditure, including interest earned thereon, are deferred.

c) Depreciation

Substantially all fixed assets acquired by the Institute are financed by the Ministry and The Ontario Cancer Treatment and Research Foundation. The cost of such assets is recorded in these financial statements and depreciated on a straight-line basis at the following annual rates:

Buildings	2 1/2%
Equipment and furniture	5 - 20%

d) Pension plan

Pension expense represents cash contributions and accruals for the estimated funding requirements for planned adjustments to benefits.

2. Tax status

The Institute is registered as a charitable organization under the Income Tax Act (Canada) and is therefore exempt from income taxes and may issue tax-deductible receipts to donors.

3. Pension plan

The Institute has a voluntary pension plan for its employees. Based on the most recent actuarial valuation of the plan as at January 1, 1986, there is no unfunded liability. Total pension expense for the year was \$1,885,274 (1987 - \$1,561,060).

4. P.M.H. Trust

P.M.H. Trust is a separate corporation without share capital and with its own Board of Directors. P.M.H. Trust receives and applies funds to assist the Institute in cancer research, education and treatment. The accounts of P.M.H. Trust are not included in these financial statements.

5. Other accounts receivable consist of:

	1988	1987
Professional groups associated with the hospital	\$267,243	\$315,468
Other funding agencies	135,587	157,230
Miscellaneous	210,755	192,898
	<u>\$613,585</u>	<u>\$665,596</u>

6. Fixed asset adjustment

During the year, the Institute finalized an inventory of fixed assets in use prepared by General Appraisal of Canada Limited as at December 31, 1985. The cost assigned to each fixed asset in the inventory was the original cost based on historical records, where available. Estimates of historical cost were used when original records were not available. Estimates of accumulated depreciation were based on guidelines developed by the Canadian Hospital Association.

The inventory resulted in an adjustment to the net book value of fixed assets of \$2,410,710 as at December 31, 1985. This adjustment was reflected in the accounts as a reduction of \$4,608,688 in equipment and furniture, a reduction of \$2,197,978 in accumulated depreciation and a reduction of \$2,410,710 in the fund balance. Since the assets to which this adjustment relates were financed by grants credited to the fund balance before April 1, 1986, this adjustment has been reflected as a decrease in the fund balance as at that date.

7. Commitments

Outstanding purchase orders for capital equipment amounted to approximately \$2,413,524 at March 31, 1988.

8. Comparative figures

Certain of the 1987 comparative figures have been reclassified to conform with the presentation adopted in the current year.

Publications...Sharing Our Discoveries

■ To have a paper accepted for publication

in a leading journal is a recognition of excellence and achievement. During the past year, OCI/PMH staff published about 220 papers in major international journals of science and medicine...

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Across the World

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Members of the Staff

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AUXILIARY OF THE PRINCESS MARGARET HOSPITAL AND LODGE

President: Mrs. J. Morden

1. During the past year, the Department of Radiology and the Nuclear Medicine Department joined to become the Department of Imaging with a Division of Nuclear Medicine.

* New Appointment in 1987-88

**Retirement/Resignation

***Honorary Board Member

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